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| 09/427,114      | 10/26/1999  | MITSURU OBARA        | 009683-353          | 2737             |

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| EXAMINER |
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MEONSKE, TONIA L

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| ART UNIT | PAPER NUMBER |
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2183

DATE MAILED: 03/08/2004

23

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/427,114

Applicant(s)

OBARA ET AL.

Examiner

Tonia L Meonske

Art Unit

2183

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Objections***

2. Claims 10 is objected to because of the following informality:  
  
Claim 10 does not conclude with a period. Please insert a period at the end of claim 10.  
  
Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-26 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Kuo et al., US Patent 5,299,309.
5. Referring to claim 25, Kuo et al. have taught a data processing device comprising:
  - a. a first processor for executing first processing on data to be processed (Figure 2, element 14);
  - b. a second processor for executing second processing on said data to be processed that was subjected to the first processing (Figure 2, element 20); and

- c. a memory for storing said data to be processed in association with state information to represent the processing state of said data (Figure 2, element 34 and element 25), wherein
  - d. said first and second processing are asynchronously executed on said data to be processed by said first and second processors (abstract, column 2, lines 46-65) and said first and second processors share said memory (abstract, column 2, lines 46-65, Figure 2, element 34).
- 6. Referring to claim 26, Kuo et al. have taught an image processing device comprising:
  - a. a first image processor for executing first image processing on image data (Figure 2, element 14, abstract);
  - b. a second image processor for executing second processing on said image data that was subjected to the first processing (Figure 2, element 20, abstract); and
  - c. a memory for storing said image data in association with state information to represent the processing state of said data (Figure 2, element 34, abstract, column 2, lines 46-65, element 25), wherein
  - d. said first and second image processings are asynchronously executed on said image data by said first and second image processors (abstract, column 2, lines 46-65) and said first and second image processors share said memory (abstract, column 2, lines 46-65, Figure 2, element 34 and element 25).
- 7. Referring to claim 1, Kuo et al. have taught a data processing system comprising:
  - a. a plurality of processors for executing a series of different types of processing functions on data to be processed in a prescribed order (Figure 2, elements 14 and 20),

Art Unit: 2183

each processor executing a processing function different from one another (Figure 2, elements 14 and 20, abstract, column 2, lines 46-65) and said data to be processed being image data that consists of a plurality of pixel data (abstract); and

- b. a memory for storing said data to be processed in association with state information to represent the processing to be performed next for each pixel data of said data to be processed, (Figure 2, elements 34, 30, and 25) wherein
- c. said processing functions are asynchronously executed on said data to be processed by said plurality of processors (abstract, column 2, lines 46-65), one processing is executed on each pixel data by one of the processors at a time (abstract, column 2, lines 46-65) and said plurality of processors share said memory (abstract, column 2, lines 46-65).

8. Referring to claim 2, Kuo et al. have taught the data processing system according to claim 1, as described above, and wherein the plurality of processors each determine if said data to be processed can be processed based on said state information (abstract, column 2, lines 46-65, When the current command is completed, it is determined that the data can be processed. Figure 2).

9. Referring to claim 3, Kuo et al. have taught the data processing system according to claim 2, wherein

- a. said plurality of processors each execute a processing on said data to be processed (abstract, column 2, lines 46-65), and then rewrite said state information corresponding to the processed data (abstract, column 2, lines 46-65, column 4, lines 20-24, column 4, lines 40-46).

Art Unit: 2183

10. Referring to claim 4, Kuo et al. have taught the data processing system according to claim 1, as described above, and further comprising a first controller for controlling said plurality of processors to execute said series of processing functions based on said state information (abstract, column 2, lines 46-65, column 4, lines 20-24, column 4, lines 40-46, Figure 2, Each processor controls itself to execute the processings based on state information and each individual control cooperates with the control of the other processors to provide control for the entire system).

11. Referring to claim 5, Kuo et al. have taught the data processing system according to claim 4 as described above, and wherein said first controller rewrites said state information corresponding to processed data in response to the completion of each processing by said plurality of processors (abstract, column 2, lines 46-65, column 4, lines 20-24, column 4, lines 40-46, When a current processing is completed, the CPU rewrites said state information to the Graphics processor.).

12. Referring to claim 6, Kuo et al. have taught the data processing system according to claim 1, as described above, and further comprising a second controller for determining an attribute of said data to be processed (column 3, lines 15-29), wherein

a. said second controller rewrites said state information corresponding to said data to be processed in order to change the order of executing said series of processing functions if it is determined that said data to be processed has a prescribed attribute (column 3, lines 15-29, When the parameter is masked, then the parameter is not transferred.).

13. Referring to claim 7, Kuo et al. have taught the data processing system according to claim 6, as described above, and wherein said second controller rewrites said state information

Art Unit: 2183

corresponding to said data to be processed in order to change the order of executing said series of processing functions, if it is determined that said data to be processed has a prescribed attribute (column 3, lines 15-29, When the parameter is masked, then the parameter is not transferred.).

14. Referring to claim 8, Kuo et al. have taught the data processing system according to claim 1, wherein said memory has one region to store said state information corresponding to a single region where data to be processed is stored (Figure 2, elements 34 and 25).

15. Referring to claim 9, Kuo et al. have taught the data processing system according to claim 1, as described above, and wherein said memory has one region to store said state information corresponding to a plurality of regions where data to be processed is stored (Figure 2, elements 34 and 25).

16. Referring to claim 10, Kuo et al. have taught the data processing system according to claim 1, as described above, and wherein said data to be processed is image data (abstract).

17. Claims 11-20 do not recite limitations above the claimed invention set forth in claims 1-10 and are therefore rejected for the same reasons set forth in the rejections of claims 1-10 above.

18. Referring to claim 21, Kuo et al. have taught the data processing system of claim 1, as described above, and further including wherein a given data item is stored at the same location in said memory after each of said plurality of processing functions is performed on said given data item (Figure 2, element 34).

19. Referring to claim 22, Kuo et al. have taught the data processing of claim 21, as described above, and wherein the state information for said given data item is stored at the same location in said memory after each of said plurality of processings is performed on said given data item (Figure 2, element 34).

Art Unit: 2183

20. Claim 23 and 24 do not recite limitations above the claimed invention set forth in claim 21 and 22 and are therefore rejected for the same reasons set forth in the rejection of claims 21 and 22 above.

*Response to Arguments*

21. Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new ground(s) of rejection.

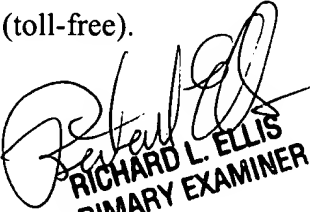
*Conclusion*

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tonia L Meonske whose telephone number is (703) 305-3993. The examiner can normally be reached on Monday-Friday, 9-6:30, with every other Friday off.

23. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie P Chan can be reached on (703) 305-9712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

24. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tlm

  
RICHARD L. ELLIS  
PRIMARY EXAMINER